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10/033,823	12/19/2001	Robert Kincaid	10010724-2	8461

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Agilent Technologies, Inc  
Legal Department, DL429  
Intellectual Property Administration  
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EXAMINER

LE, UYEN T

ART UNIT	PAPER NUMBER
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2171

DATE MAILED: 06/08/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

P26

# Office Action Summary

Application No.

10/033,823

Applicant(s)

KINCAID ET AL.

Examiner

Uyen T. Le

Art Unit

2171

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-54 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1,2,18-34,36,38-50,51 and 54 is/are rejected.
- 7) ☒ Claim(s) 3-17,35,37,52 and 53 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Specification*

1. The disclosure is objected to because it contains embedded hyperlink and/or other form of browser-executable code at page 4, paragraph 0012 for example. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

### *Claim Rejections - 35 USC § 102*

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 1, 18, 19, 22, 34, 50 are rejected under 35 U.S.C. 102(a) as being anticipated by applicant's admitted prior art (AAPA) at paragraphs 0008-0010.

Regarding claim 1, AAPA discloses all the claimed subject matter (see 0008-0012). The claimed metasearch engine capable of accessing generic, web-bases search engines and domain-relevant search engines is met by the metasearch engines of metacrawler®, Dogpile®, Search.com, receiving a query inputted by a user, fetching raw data search results in the form of text documents, displaying the raw data on a user interface and supplying the raw data to a data mining module wherein the data mining module prepares a single list of all of the documents, assigns relevance scores to the documents, forms clusters of related documents according to an unsupervised

clustering procedure and displaying the clusters of related documents on the user interface (see 0008-0010). Applicant seems to emphasize in the background of the invention at paragraph 0010 that although existing metasearch engines employ some type of unsupervised clustering to group documents by similar topics, none of them have data mining algorithms tuned specifically to the sciences or more particularly to the life sciences. However, this limitation is not reflected in the claim language. Furthermore, the claimed metasearch engine is not required to perform any task. It is merely "capable" of accessing other search engines.

Claim 50 essentially corresponds to a computer program product to perform the method of claim 1, thus is rejected for the same reasons stated in claim 1 above.

Regarding claim 18, the metasearch engine of AAPA is clearly capable of accessing in-house, proprietary databases and any other information databases that can be wrapped in a CGI-based web application server since it acts as a midde-man (see 0008).

Regarding claim 19, AAPA discloses the claimed displayed list of search engines (see 0052).

Regarding claim 22, clearly the documents in AAPA are text-based (see 0008).

Regarding claim 34, AAPA discloses assigning relevance ranks based upon the frequency of occurrence of query terms in each of the received documents (see 0005).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 20, 21, 30, 31, 33, 47, 48, 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art (AAPA) at paragraphs 0008-0012.

Regarding claims 20, 21, although AAPA does not specifically show the claimed context menu and presets, it is notoriously well known in the art to use preset and search by context. Therefore, it would have been obvious to one of ordinary skill in the art to include the claimed features in order to help users decide how to conduct their search.

Regarding claim 30, AAPA discloses all the claimed subject matter (see 0008-0012). The claimed metasearch engine capable of accessing generic, web-bases search engines and domain-relevant search engines is met by the metasearch engines of metacrawler®, Dogpile®, Search.com. The claimed receiving a query inputted by a user, fetching raw data search results in the form of text documents, displaying the raw data on a user interface and supplying the raw data to a data mining module wherein the data mining module prepares a single list of all of the documents, assigns relevance scores to the documents merely read on the fact that any search engine presents a list of results and each result is associated with a score. Although AAPA does not specifically show a single list, it would have been obvious to one of ordinary skill in the art to add such feature in order to present results to the requesters in a simple familiar format. The claimed forming clusters of related documents according to an unsupervised clustering procedure and displaying the clusters of related documents on

the user interface is met by the fact that AAPA uses unsupervised clustering to categorize documents (see 0008-0010). Applicant seems to emphasize in the background of the invention that although existing metasearch engines employ some type of unsupervised clustering to group documents by similar topics, none of them have data mining algorithms tuned specifically to the sciences or more particularly to the life sciences. However, this limitation is not reflected in the claim language. Furthermore, the claimed metasearch engine is not required to perform any task. It is merely required to be "capable" of accessing other search engines.

Claim 31 merely differs from claim 1 by the last paragraph. Although AAPA does not specifically show displaying in a format defined by the clusters and a format defined by the categories, it would have been obvious to one of ordinary skill in the art to include such features in order to provide more choices to the users.

Claims 33, 51 correspond respectively to the system and computer program product for the method of claim 30, thus are rejected for the same reasons stated in claim 30 above.

Claims 47, 48 essentially recites the limitations of claim 33, thus are rejected for the same reasons stated in claim 33 above.

4. Claims 2, 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art (AAPA) at paragraphs 0008-0010, further in view of Cutting et al "Scatter/Gather: a cluster-based approach to browsing large document collections", ACM 1992, pages 318-329.

Regarding claims 2, 36, although AAPA does not specifically show that the unsupervised clustering procedure performed by the data mining module employs a group-average linkage technique to determine relative distance between documents, it is well known in the art as shown by Cutting to use such technique (see page 321, column 1). Therefore, it would have been obvious to one of ordinary skill in the art to include the claimed features while implementing the method of AAPA in order to benefit from a well known clustering technique.

5. Claims 23-29, 32, 38-46, 49, 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art (AAPA) at paragraphs 0008-0010, further in view of Anwar (US 2001/0047355).

Regarding claim 23, the claimed method merely reads on the fact that it is well known in the art to refine a search and to use previous search results in subsequent searches as shown by Anwar (see Figures 4, 7B). Since the method of clustering of AAPA is unsupervised, it would have been obvious to one of ordinary skill in the art to include the claimed features in order to allow learning for unsupervised clustering.

Claims 24, 29, 32, 46, 49, 54 merely read on the fact that the method allows user feedback and learns what is of interest to a user. Although AAPA does not show the claimed features, it is well known in the art to monitor users feedback to learn about users' interests as shown by Anwar (see Figure 4). Since the clustering method of AAPA is unsupervised, it would have been obvious to one of ordinary skill in the art to include the claimed features in order to learn what is of interest to users.

Regarding claims 25-28, since users' requirements vary, it would have been obvious to one of ordinary skill in the art to include any relevance weighing factor as claimed depending on users' applications.

Regarding claims 38-44, the claimed features have to be present in AAPA as modified by Anwar for the system to perform unsupervised clustering.

Regarding claim 45, the claimed system merely reads on the fact that it is well known in the art to refine a search and presents results of subsequent searches as shown by Anwar (see Figures 4, 7B). Since the system of clustering of AAPA is unsupervised, it would have been obvious to one of ordinary skill in the art to include the claimed features in order to allow learning for unsupervised clustering.

***Allowable Subject Matter***

6. Claims 3-17, 35, 37, 52, 53 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the prior art of record does not disclose or make obvious, in combination with all the limitations recited in respective parent claims:

The algorithm recited in claims 3, 37 for group-average linkage technique

The customized stop word lists to be used with regard to the generic, web-based search engines and domain-relevant search engines as recited in claims 7, 35, 52

The process of categorizing documents independently of the unsupervised clustering procedure as recited in claims 4, 11, 53



***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Anick et al (US 6,519,586) teach automatic construction of faceted terminological feedback for document retrieval.

Hansen et al (US 2003/0014399) teach organizing record of database search activity by topical relevance.

Keyes et al (US 2002/0116309) teach sampling portfolios for optimal underwriting.

Fahy (US 2002/0052692) teaches hierarchical cluster analysis of large sets of biological data including highly dense gene array data.

Barnhill et al (US 6,714,925) teach identifying patterns in biological data using a distributed network.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Uyen T. Le whose telephone number is 703-305-4134. The examiner can normally be reached on M-F 7:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 703-308-1436. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

18 May 2004



**UYEN LE**  
**PRIMARY EXAMINER**